PACK RATS

CHEESE RATS W3CCX CLUB CALL:



MT. AIRY VHF RADIO CLUB, INC.

MT. AIRY VHF RADIO CLUB, INC., PHILADELPHIA, PENNSYLVANIA 50.125, 144.150, 220.125, 432.110, 1296.110 Mhz - W3CCX - Repeater 222.98/224.58 Mhz

Affiliated Club: AMERICAN RADIO RELAY LEAGUE

Meetings: Third Thursday of each month at 8:00 P.M. Southampton Free Library, 947 E. Street Road

> Southampton, Pennsylvania 19866

VOLUME XXVI

SEPTEMBER, 1987

NUMBER 9

THE PREZ SEZ

The August outdoor meeting and picnic was a big success. The weather was excellent. The food and drink was excellent. The swimming pool was extremely refreshing. The guitar playing and singing in the evening was superb! Even the afternoon horseshoe tournament was pretty good (Well, maybe not too bad!)

In all, I think everyone had a great time. I know I did. Many thanks to Dave and Sylvia Hackford for opening their home to us and for their hospitality.

The latest issue of QST has the June 1987 Contest Results in it. The Pack Rats placed 7th in the multi-op category and established a new Roanoke Division Record. Congratulations to everyone who went on the Spruce Mountain Expidition and thanks to all the Pack Rats that were on the air from home to work W3CCX/8. Also, in the same issue is a picture of the expedition crew. setting up on Friday afternoon. You can see for yourself how hard everyone works to get set for the Contest.

The September meeting will be back at the Southampton Library. Paul, WB3JYO, will be giving a presentation on Microwave Strip Line Techniques. It should be intensly interesting. I hope to see you all there.

73,

Bob. N2SB

WESTLINK REPORT AUGUST 21, 1987

THE SOCIETY OF BROADCAST ENGINEERS has filed comments supporting amateur radio. The highly prestigious and politically influential Society said "No" to the FCC Office of Engineering & Technology's proposal to reallocate the lower 40% of the amateur 1 1/4 meter band to the Land Mobile Service. Their contrary stand to the reallocation proposal come in reply comments filed before the FCC in the matter of General Radio Docket 87-14. The SRE (CONTINUED ON PAGE 6)

Pack Rats CHEESE BITS is a publication of THE MT. AIRY VHF RADIO CLUB, INC. Philadelphia, Pa. and is published monthly.

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We operate on an exchange basis with other publications. Anything that is printed in CHEESE BITS may be reprinted, unless otherwise stated, provided that proper credit is given.

SWAP SHOP ITEMS - NO CHARGE

DEADLINE FOR ARTICLES IS THE GENERAL MEMBERSHIP MEETING: THE THIRD THURSDAY OF THE MONTH.

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WA3AXV, RONALD WHITSEL
215-355-5730

ÁWARDS CHAIRMAN:

W2EIF, JOSEPH KILGORE 609-783-9478

CLUB HISTORIAN:

W3CL, HARRY B. STEIN

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7:30 PM - 50.125 MHz	W3CL
8:00 PM - 144,150 MHz	W2EIF
8:30 PM -> 222.98/224.58	K3GAS
8:30 PM - 220,125 MHz	KS2T/WB2NPE
9:00 PM - 432.110 MHz	WA2OMY/K1PXE
9:30 PM - 1296.1 MHz	N3CX/WA3JUF/WA3NUF
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CALENDAR OF COMING EVENTS By Harry Brown, W3IIT

SEPTEMBER	
5-6	International Region 1 VHF Contest, 2 meters only.
6	EME Perigee
10	September Board of Directors Meeting at the QTH of Dave, WB2VLA, at 8:00 P.M. Call: 609-882-1040 for directions.
10-13	Microwave Update 1987 Conference, Estes Park, Colorado. Contact WOPW for information.
12-14	September VHF QSO Party. See August QST Page 78 for rules.
17	September meeting of the Club at the Southampton Free Library on Street Road in Southampton, Pa. The program will be by Paul, WB3JYO. He will discuss the application of thick film circuits to operate in the microwave region. Directional couplers using this technique have been produced.
19-20	ARRL 10 GHz Cummulative Contest. See August QST, Page 82 for the rules.
20	The MIT Electronics Research Society and UHF Repeater Society will hold a flea market at Albany and Main Street in Cambridge, Mass
20	The SJRA 39th Annual Hamfest will be held in Pennsauken, N.J. at the Pennsauken High School at Rte. 73 and Remmington Avenue. Talk-in on 145.290.
20	LIMARC Hamfair at New York Institute of Technology. Rte 25A/Northern Blvd., Old Westbury, N.Y. Talk-in on 146.25/85.
21	Optimum time for TE propagation (+/-2 weeks).
OCTOBER	
10	Mid Atlantic VHF Conference at the Warrington Motor Lodge in Warrington, Pa. (Approx. 6 miles North of the Pa. Turnpike on Rte. 611).
11	HAMARAMA will be held at the Bucks County Drive-In Theater on Rte. 611 in Warminster, Pa.

WANTED: Complete set of 73 magazines; QST magazines from 1930-1986 complete; Saturn 6 Halos in any condition; Hi-Par 3 element Hilltopper in any condition. The following issues of CQ Magazine: 1945: Jan, Feb., Mar., Apr., May. 1946: Jan., Feb., Apr., May, Jun., Sep., Oct., Dec. 1947: Apr., Sept.

<u>CONTACT</u>: Harry, KA3B. Phone: 1-215-468-1512

A PLUG FOR QEX - BY THE EDITOR

This ARRL publication is an FB experimenter's exchange and AMSAT Satellite Journal. The August issue features an article by Dave Mascaro, WA3JUF on transverter band switching display and universal power supply. Bill Olson, W3HQT is a regular columnist writing on a variety of VHF/UHF technologies. Dave and Bill are Pack-Rats of long standing. I recommend that you subscribe to QEX.

* * *

A MESSAGE FROM JEAN PRIESTLEY, KA2YKN

Public Service or if you prefer Emergency work! Have you thought about it lately? Have you stopped to think about the last time you participated? Did you say 10 years? Did you say you just don't have the time or it isn't your bag anymore? Maybe your thinking it is for someone else or you put your time in already. Don't sit back on your Laurels just yet. There is plenty of work to be done and we will need quite a few good people. There are many good reasons to take part. If you have never tried because you feel you don't know enough get some on the air experience next event. Get activated and you will learn fast and find it very rewarding.

Just a couple of the best reasons for being active in Public Service is serving your community, orienting yourself with your abilities and limitations and your community. I can't stress enough the importance of being prepared in advance for a read emergency and don't think for even one minute that it can't happen just because we haven't had an earthquake lately. Recently there was a chemical leak in Maple Shade that affected a large number of people. A very bad storm killed a young man one Saturday night. A large train wreck occurred several months ago that hams assisted with. If it happened somewhere else it could happen locally too.

Yes, there is something each of us can do and make our efforts collective. We can have alternate power sources, be prepared to know how to handle traffic if necessary and have the proper information about your community handy. These only scratch the surface. Of course always be sure your equipment is in proper working condition and maintain self-discipline and avoid overreacting in an emergency situation.

Think about what you have just read and keep in mind that we and our families are a special people and have special skills we can contribute to our communities in times of special need. Working together we can make a big difference. But we must prepare today for our communities tomorrow.

FROM THE WESTLINK REPORT AUGUST 7, 1987

AEROTRON, INC., the principal factor outside the FCC's own Office of Science and Technology attempting to reallocate the lower 40% of the 1 1/4 meter band to land mobile use, has taken to name calling in its battle with radio amateurs.

In a portion of the company's reply comments on Docket 87-14, Aerotron leaves no room for imagination when it declares:

"Aerotron believes the many comments filed by or on beahlf of the Amateur Radio Service licensees represent the bias of one user group only, and that, overall, they are extremely shortsighted. The Notice gives the amateur community a permanent place for them to expand their use. Now is the time to reallocate the 220 - 222 Mhz sepctrum while it is lightly used not five years down the road when the amateurs may have made significant investments in equipment but still not be making an afficient use of that portion of the spectrum."

Aerotron's attack on the integrity of members of the US Amateur Radio Service does not end there. Obviously concerned that their attempt to appropriate that which is ours might fail, the company ends its reply comments to the FCC thus: "As the Commission is well aware, it is typical in allocations proceedings affecting the Amateur Service for the Commission to be inundated with mostly brief and conclusionary comments from the amateurs who resist any change in the rules, however slight, that they see as adverse to their interests. Such is the case in this proceeding. Aerotron is confident that the Commission will see through such tactics and that it will preserve its proposed reallocation."

SWAP SHOP

FOR SALE: Yaesu FT-757GX-\$600= MMT 144/28R-\$285 MMT 432/28S - \$220 - Mirage Cl012 - \$220. Kantronics The Interface CW/Rtty w/software on disk for C64, never used \$115. Telrex two 2 meter 2M814 w/phasing harness \$200.

CONTACT: Jay Miller, KS2T
527 Woodview Road
Toms River, N.J. 08753
Phone: 201-244-7623

FOR SALE: Typewriters, tape recorders, tubes. Reel to reel players & recorders; miniature toggle switches, tantalum & electrolytic caps, resistors, chokes, transformers, electronic parts, pots, fuses, 8 track tapes, cassette tapes. Sears 15 In. Color TV \$50. Triplet A.C. Ammeter/w.case, Heath TV post/marker sweep Gen. 1G57A, Heath FM stereo gen. 1G37 Heath attenuator - all for \$60. Heath monitor scope HO10 \$25. Heath lo volt solid state P.S. - EU41A \$20.

CONTACT: Doc Cutler, K3GAS

Phone: 215-635-1078 for appointment.

* * *

Dear Members of Pack Rats:

I received Genes' "Cheese Bits" yesterday. Thanks for silent key in your paper. Really appreciated it as Gene was not a member but a very close friend of the Pack Rats. Always treated us so nice when we came to the dinners and every - thing else. Will never be the same. I really miss Gene. Always together almost 40 years this Nov. Your friends, Charlotte, Gene and Jan. (XYL - WA2MGV & WB2UVB, KA2CQX)

* * *

APPLICATION FOR MEMBERSHIP

WB2JHG - Mark Adams - XYL - Alison 24 Branin Road Medford, N.J. 08055 Phone: 609-654-4441 WANTED: Penna, Ham License Plates - Need 3 plates to complete my collection. Any 1957 Ham plate; 1958-1964 ham plate with the word "Suburban" across the top; any 1977 to present plate with a yellow scotchlite background. Will pay fair price for each.

CONTACT: Charles D. Harrington
1104 Cockburn Drive
West Chester, Pa. 19382
Phone: 215-399-1249

COMMERCIAL AD

LOOP YAGIS: 902 Mhz and 1296 Mhz \$77 kît,\$93 assembled & tested, 2304 Mhz \$67 kit and \$80 assemblad. Also, 2 and 4 way power dividers & stacking frames LINEAR AMPLIFIERS, 1296-10W in 35 watt out \$295. Call for special Pack Rat discounts & prices on complete arrays! NEW!! Microwave Transverters & preamps by LMW ELECTRONICS, 2304 Mhz deluxe transverter Model 2304 TRV2D: 144 Mhz I.F. Power out 2 watts, includes separate GaAsFET preamp, NF1 db and built-in T/R sequencing circuit, relative output meter & built-in I.F. Attenuator to match inputs from 100 MW to 10 watts. Price complete \$569; 1296 deluxe transverter, model 1296TRV6D similar to 2304 unit 6-7 watts out, .7db NoFo price \$489 Stripped down versions availabel at lower cost, also available in kit form. 902 Mhz version coming soon, Universal local Oscillato Kit model ULO. Multiple outputs in 1 and 1.2 Ghz range depending on xtal. \$33,75 less xtal. Write to obtain complete catalog. DOWN EAST MICROWAVE, Bill Olson, W3HQT, Box 1655A, RFD #1 Bernham, ME. 04922, Phone: 207-948-3741.

RESULTS: 1987 JUNE VHF QSO PARTY

Mark, AA2Z our HQ Pack-Rat (Operating WA2OMY) made number one in the Atlantic Division with a score of 305,660. A new division record.

The Pack-Rat Spruce Knob, W. Va. Gang, W3CCX/8 made the multi-op score of 632,548 for number one in the Roanoke Division. Also a new division record.

Pack-Rats AA2Z and KB3QM made the top ten in the single operator category. The W3CCX/8 group made the top ten in the multi-op list.
(From the September 1987 issue of QST)

* *

TID BITS

Sunspot No. for July 1987 = 33.0. Smoothed No. for January 1987 = 17.5.

The 6 meter band opened the weekend of August 15-16 with very little local activity - K3ACR reports.

Don, KA3MGB back from Omiya City, Japan where he received honorable welcome from friends which included the Mayor: Ask Don to show you the 3 albums of pictures.

The Hackfords, Dave, N3CX and Sylvia, KA3MXS, hosted a great picnic at their QTH in the hills of Harleyville, Pa. on Saturday, August 15, 1987. A total of 42 Pack-Rats, their families and friends enjoyed each others company. Swimming, horse-shoes, basketball, chitchat; a great barbeque with desserts brought by the ladies. A short formal meeting was held in the early evening. (Where is Zeigler Road?)

It sure was nice to great Ron, KB3QM at the picnic accompanied by his son and a friend. He is our Delaware Pack-Rat.

A "lick and stick" of Hamarama flyers will be held in early September - can you come out and help? Location will be announced on the Monday nite nets.(QTH, W3ZD - SEPT. 3, 7PM) Glad to know that Section Manager. Kay KC3LM knows what a Contest is.

Happy to report that Jay, KS2T out of the hospital and feeling well enough to report on the 6 meter net. Hope your mother is feeling better also, Jay.

It saddens us to report that Ed Braddock, WIXV (W2BAY) an old friend of the Pack-Rats became a Silent Key. Condolences to the family.

Our best wishes to Lee Aurick, W1SE on his recent retirement as ARRL HQ advertising Manager.

Hamarama flyers are available at W3CL, K3GAS, and WB2VLA. The conference is on the 10th of October; the Flea Market is on the 11th. CU There!!

Did you know that Pack-Rat Dan Mitten WA3NFV has had a pilots license. He had fun trying to find Rick's (WB2NPE) Tabernacle QTH from the air. Enjoyed the luncheon, Dan.

Dave, N3CX our Vice Prez and program director has organized meeting events until March 1988 - how about that!!

Gary, WA20MY the Conference Chairman (October 10, 1987) has an FB program lined up. The technical talk details will be available as hand-outs compiled in a book prepared by ARRL Headquarters.

* * *

WESTLINK REPORT AUGUST 21, 1987 CONTINUED FROM PG. 1

began by pointing out that it has a high regard for the Amateur Radio Service: "SBE recognizes the importance of amateur radio communications. Broadcasting began as a hobby built upon amateur radio. It is on the amateur bands that many engineers first experience the rewards of mastering the theory and practice of electronics and communications. SBE estimates that 40% of its members are amateur radio operators."

SBE next established its own credentials to comment on the docket: "As a pioneer in Part 74 frequency coordination and a key participant in the newly formed National Frequency Coordinating Council for broadcast support spectrum under Part 74, SBE has had germane experience in spectrum planning, use of spectrum - efficient technology and coordination of bands and critical band adjacency problems. SBE feels that its experience is extremely relevant to the proposals of the Notice."

From this point on, the SBE remarks were directed very sharply at the overall issues outlined in General Radio Docket 87-14: "SBE believes that the reallocation of the 220-225 Mhz band to the land mobile industry is unnecessary and would result in under utilization of the band. The Commission's assumption that the land mobile industry needs this additional spectrum is unfounded.

YARDLEY BEERS 740 WILLOWBROOK ROAD BOULDER, COLORADO 80302

OPERATION FROM THE ISLE OF MAN

Between August 25 and September 16, I shall return to the Isle of Man to work again as a volunteer on the archaeological excavations at Peel Castle. Dorothy and I shall exchange houses with Jack and Margaret Etherington (GD5UG), and Jack and I shall operate each other's amateur radio stations. I shall use the call GD9/WØJF.

My operating time is limited, as I expect to spend most of my time to the excavations, work which is satisfying but physically tiring. Some of my operating time will be unscheduled, but I shall attempt to be on at the following times to say hello briefly to as many of my friends who call me:

Mondays August 31, September 7 and 14 and Wednesdays August 26 and September 2 and 9, I shall try to be on from 2030 to 2300 GMT. On August 26 and 31 and September 9, I shall be on CW near 14,055 kHz for the first hour and SSB the rest of the time near to 14265 kHz. On the remaining three days I shall start on SSB and shift to CW for the last hour. If I have trouble getting out on SSB I shall shift to CW.

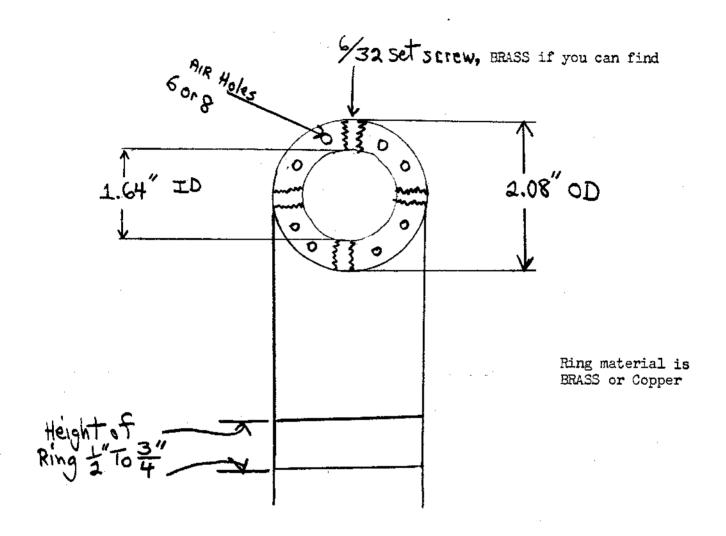
Also I shall try to put in some time in the European Phone DX-Contest September 12-13.

In setting up these schedules it is my purpose to greet as many of my friends as possible from the Isle of Man. I am sending copies of this notice to the five radio clubs to which I belong plus a number of individuals and thereby I am informing directly or indirectly about 500 people. If all of them should call me I would have to limit each QSO to less than a minute. Therefore, I request that (1) you postpone all rag chewing to other occasions, (2) that if I have worked you once please do not call me again unless it is on the other mode, and (3) that during this schedule period you make no requests for changes in band or mode. If conditions are good when I am on SSB I shall try about once in every ten or fifteen minutes to make some brief remarks about my activities.

I hope to see you.

73. Youlley

AM6154 and AM6155 4CX250 Tube TYPE Adapter Ring 5/16/87



After modifying a AM6154 for 432 and not having a 8930 ,I decided to build a adapter ring for 4cx250 type tubes.After working on the lathe for awhile I came up with a working ring.Results are as follows: 4cx250B plate diss_250watts_8930 plate diss_350-watts_

After setting bias on 4cx250 I started out with low drive and slowly tuned up amp.I could get over 300 watts out on 432 with about 8 to 10 watts drive.But because of lower plate dissapation on 4cx250 tube I'am running about 250 watts output.At the present time I'am using a 7580 in my amp.

73 Dave N3CX

THE MT. AIRY VHF RADIO CLUB, INC. PRESENTS

HAMARAMA'87

AND MID-ATLANTIC STATES VHF CONFERENCE OCTOBER 10-11, 1987

THE CONFERENCE

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Name		<u> </u>	Call	No. of Tickets				
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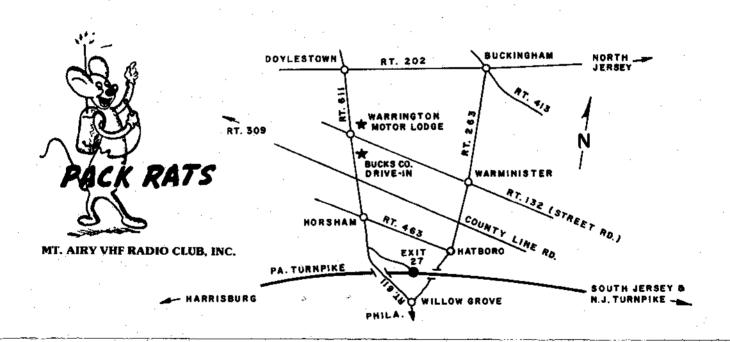
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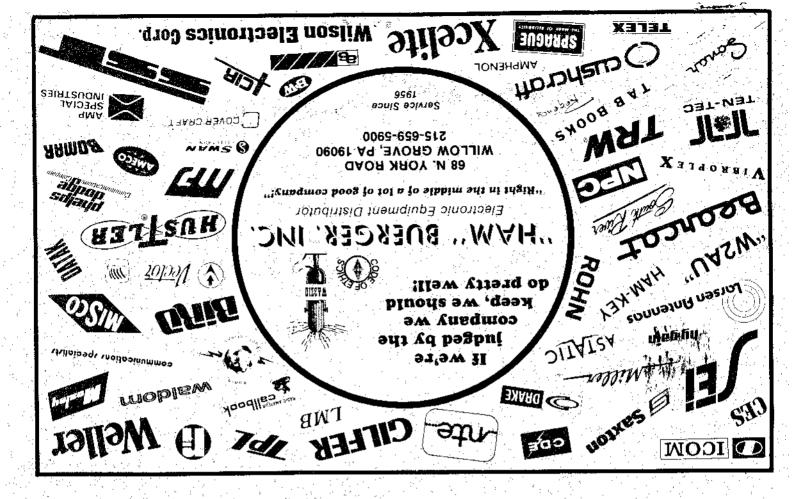




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